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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,194	04/23/2001	Timothy P. Croughan	98A9-USCROUG	2938

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PATENT DEPARTMENT  
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EXAMINER

KRUSE, DAVID H

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/830,194

Applicant(s)

CROUGHAN, TIMOTHY P.

Examiner

David H Kruse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,11,13-15,31,38,54,61,129-132,134-136,138,140-146,148-150,152,154-160,162-164,166 and 168-185 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/12/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

Continuation of Disposition of Claims: Claims pending in the application are 1-5,7-9,11,13-15,31,38,54,61,129-132,134-136,138,140-146,148-150,152,154-160,162-164,166 and 168-185.

### **STATUS OF THE APPLICATION**

1. This Office action is in response to the Amendment and Remarks filed 4 October 2004.
2. Those rejections not specifically addressed in this Office action are withdrawn in view of Applicant's amendments to the claims.
3. The IDS filed 12 January 2004 is duplicative of the IDS filed 4 June 2004 that has already been considered. The Examiner has attached a signed copy hereto.
4. The rejections under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Terakawa *et al* 1992 (Japan. J. Breed. 42:267-275) is withdrawn in view of Applicant's amendments to the claims as the prior art neither teaches nor fairly suggests the rice plant deposited under ATCC Accession Number PTA-904, or methods of using.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

6. Claims 1-5, 7-9, 11, 13-15, 38, 61, 143-146, 148-150, 152, 154-156, and 176-182 are/remain rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is repeated for the reason of record as set forth

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in the last Office action mailed 10 August 2004. Applicant's arguments filed 4 October 2004 have been fully considered but they are not persuasive.

NEW MATTER Rejection; At claim 1(b), lines 2 and 3, the limitations "first-generation hybrid" and "second-generation hybrid" do not have adequate written description support in the specification or the claims as originally presented, and constitute entry of New Matter into the claims. Claims 2-5, 7-9, 11, 13-15, 38, 61, 143-146, 148-150, 152, 154-156, and 176-182 are also rejected as containing new matter because said claims either incorporate all of the limitations of claim 1 or are dependent upon claim 1.

Written Description Rejection; The instant claims remain rejected as lacking adequate written description for the reasons of record.

Applicant argues that data obtained since the application was filed confirm that the mutant AHAS from PTA-904 in fact behaves very similarly when incorporated into different genetic backgrounds. Applicant argues that as shown in the Declaration from inventor Dr. Timothy Croughan that was submitted with the January 12, 2004 RCE, the PTA-904 line has now been crossed with numerous other varieties as part of a breeding program, and that the herbicide resistance phenotype has been essentially constant in the offspring of all these crosses, including varieties of both subspecies *indica* and *japonica*. Applicant argues that the invention works as predicted by the disclosure in rice varieties and hybrids generally, and does not depend strongly upon the genetic background of a particular derivative, and thus the specification provides an adequate written description of first- and second-generation hybrids (page 4 of the Remarks).

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These arguments are not found to be persuasive because a showing of progeny produced by crossing rice plant PTA-904 with other rice plants in the Croughan Declaration does not provide an adequate written description of the claimed invention at the time of filing. The December 2002 Croughan Declaration only confirms that an AHAS mutant enzyme exists in PTA-904, not what structural feature of said enzyme contributes to the function of said mutant enzyme in the PTA-904 rice plant, or that would describe progeny therefrom.

7. Claims 1-5, 7-9, 11, 13-15, 38, 61, 143-146, 148-150, 152, 154-156, and 176-182 remain rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for the herbicide resistant rice plant PTO-904 and methods of using same, does not reasonably provide enablement for any progeny of said deposited rice plant, any rice plant having the herbicide resistance characteristics of the plant PTO-904 or methods of using such progeny rice plants. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. This rejection is repeated for the reason of record as set forth in the last Office action mailed 10 August 2004. Applicant's arguments filed 4 October 2004 have been fully considered but they are not persuasive.

Applicant states that while reserving the right to present arguments about the canceled subject matter in the future, for example in a continuation application, it is respectfully submitted that the amendment overcomes the enablement rejection based on the broader recitation of "derivatives" of PTA-904 (page 5 of the Remarks).

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Applicant does not appear to present arguments that traverse the rejection of record as directed to the instant claims. It remains the Examiner's opinion that in the instant case Applicant has failed to adequately teach one of skill in the art how to make and use the invention as broadly claimed. The art teaches that the genetic variation among individual progeny of a breeding cross allows for the identification of rare and valuable new genotypes but that these new genotypes are neither predictable nor incremental in value, but rather the result of manifested genetic variation combined with selection methods, environments and the actions of the breeder (Kevern, US Patent 5,850,009, column 4, lines 41-46). Herbicide resistance, in and of itself is not a teaching of how to use the claimed invention. One of skill in the art at the time of Applicant's invention would recognize that many other factors are involved in making a useful rice plant. Even Applicant recognizes that herbicide-resistant rice varieties and hybrids must also have good productivity and other agronomically desirable properties to be useful (see page 29, 2<sup>nd</sup> paragraph of the specification). Applicant provides not examples of hybrid rice plants having herbicide resistance produced by crossing the exemplified PTA-904 variety with another rice plant, nor does Applicant teach what other rice varieties one of skill in the art could use to make useful progeny plants as broadly claimed.

### ***Double Patenting***

8. Claims 1-5, 7-9, 11, 13-15, 31, 38, 54, 61, 129-132, 134-136, 138, 140-146, 148-150, 152, 154-160, 162-164, 166 and 168-185 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 62, 64, 66 and 68 of copending Application No. 09/934,973, claim 70 has

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been cancelled. This rejection is repeated for the reason of record as set forth in the last Office action mailed 10 August 2004. Applicant's arguments filed 4 October 2004 have been fully considered but they are not persuasive.

Applicant argues that for the reasons given in the May 16, 2003 Amendment and the January 12, 2004 Request for Continued Examination reasons that will not be repeated in the interest of brevity it is respectfully submitted that the provisional double-patenting rejection should be withdrawn. Applicant further argues that this ground of rejection should be withdrawn at least for claims 31, 54, 129-132, 134-136, 138, 140-142, 157-160, 162-164, 166, 168-170, and 183-185, each of which contains a further limitation directed to the rice plant with ATCC accession number PTA-904. (pages 6 and 7 of the Remarks). These arguments are not found to be persuasive because the claims of the copending application are now directed to progeny rice plants produced by crossing or back-crossing rice plant PTA-904, hence the claims of the copending application render obvious the instant invention.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not



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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. No claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.

DAVID H. KRUSE, PH.D.  
PATENT EXAMINER

A handwritten signature in cursive script that reads "David H. Kruse". The signature is written in black ink and is positioned below the printed name and title.

David H. Kruse, Ph.D.  
15 December 2004

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12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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